

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON

TWO NEW SPECIES OF THE MILLIPED GENERA
CHONAPHE AND *ANIULUS*.

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Of the two new species here described, *Chonaphe michigana* is the second species of its genus to be described. The generotype, *C. armata*, occurring in the Pacific Northwest, was described by Harger in 1872 under the genus *Polydesmus*. The new species of *Aniulus* belongs in a group of species including the common *A. venustus* (Wood) and *A. impressus* (Say). The specimens of *C. michigana* were included in a small collection made by Mr. R. R. Dreisbach in Michigan, and those of *A. orthodox* in one made in Illinois, Indiana, and Tennessee by Mr. W. F. Rapp, Jr. The types are retained by the author.

Chonaphe michigana, new species.

Dorsum black, with the carinae and a narrow band across the posterior border of each tergite yellow. Legs yellow. Antennae light brown, excepting last two articles which are darker, nearly black.

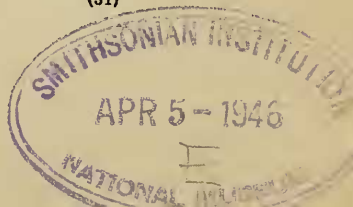
Legs long, without tarsal pads. A transverse series of four widely separated setae across clypeus with an extra seta below and close to the outermost one of these at each end of series. Also two long setae between the antennae and two toward vertex.

Dorsum strongly arched, with the carinae at middle of sides; the carinae of anterior segments nearly continuing the slant of the dorsum, but posteriorly less depressed. The collum a little narrower than the second tergite. Anal tergite with cauda narrow, distally blunt or shallowly notched, curving moderately downward. Dorsum smooth.

Sides smooth except for the pleral keels found on first seven segments.

Characterized by details of the male gonopods, such as the straight spine arising from the mesal corner of the laminate process at middle of the large lobe arising from femur. Gonopodal cavity large, with gono-

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pods widely separated at base. Details of gonopods as shown in figs. 1, and 2.

Width: 5.5 mm.

Length: About 31 mm.

Locality: Michigan: Midland County, in Midland Cemetery.

One male, the holotype, taken May 7, 1943, and one male, not in full color, taken in the county May 25, 1942, by R. R. Dreisbach.

This is a larger form than *C. armata* (Harger), the generotype, and is readily distinguishable in the details of the male gonopods.

Aniulus orthodoxus, new species.

A species of medium size, color pattern typical. A median dorsal black line distinct, a series of black spots with adjacent light maculae along each side over the repugnatorial glands and a series of less dense dark spots along lower part of each side. Dorsum between spots in some much lighter than sides.

Last tergite with caudal angle acute, produced well beyond the anal valves, the produced portion straight, not at all decurved.

In the male the stipes of the mandible with distocaudal corner produced conspicuously as shown in the figure. The collum of the male is elongate, the lower margin straight with above it a single deep sulcus. (See further, fig. 3.)

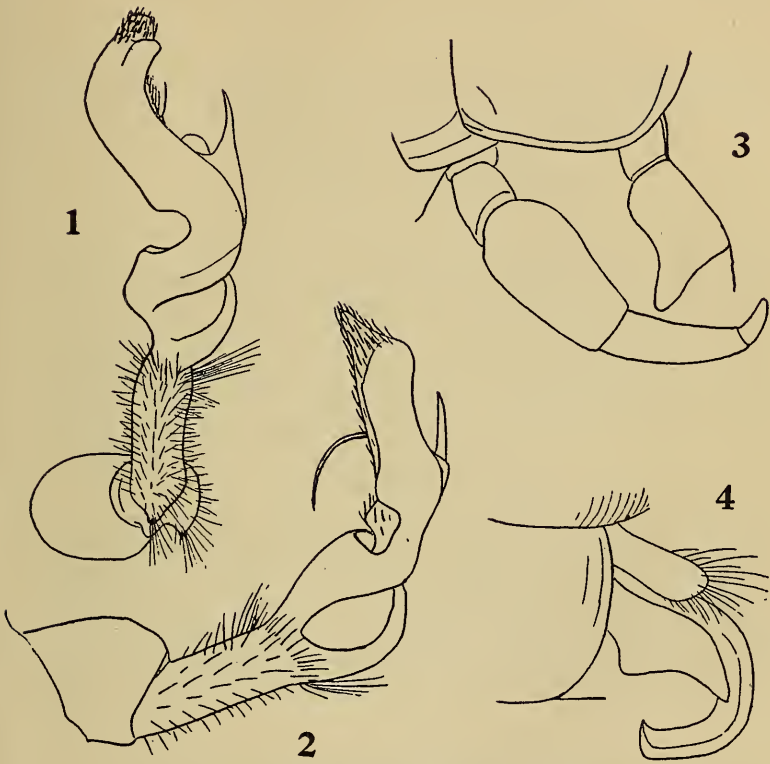
In the male the sternal plate of the eighth segment is but slightly bowed forward at middle, there touching but not overlapping the bases of the posterior gonopods. The form of the divisions of the anterior gonopods (coleopods) as shown in figure 4. Each posterior gonopod above base bent abruptly mesad to meet its mate at the mesal line, next curving caudad in contact with it and then outward and downward, the blade relatively broad. See further, fig. 4.

Length: About 27 mm.

Width: 2.2 mm.

Locality: Tennessee: Reelfoot Lake. One male and three females taken April 12, 1945, by J. and W. Rapp.

Distinct form *A. venustus* in the much broader blade of the posterior gonopods and from *A. impressus* in the form of the coxal lamina of the anterior gonopods as well as in the form and relations of the posterior pair.



New Millipeds of Genera *Chonaphe* and *Aniulus*.